(b) if so, the estiamted quantum of power generation in each of the above sectors at that time;

(c) whether it is also a fact that the cost of power generation would be reduced at national level due to increase in the average of hydro sector in the country; and

(d) if so, what are Government's views regarding such reduction?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) to (d) A hydro-thermal ratio of 40:60 is considered optimal in the Indian power sector. The current ratio, however, is only 25:75. In order to accelerate the pace of hydro projects, a policy on Hydro Power Development has been formulated by Government in August, 1998.

The CEA has conducted Long Term Generation Planning Studies to assess need based capacity requirement during the 10th and 11th Plan. Based on these studies it is estimated that the installed capacity at the end of the 11th Plan would be 2,38,993 MW comprising 75,534 MW of hydro, 1,50,974 MW of thermal and 12,485 MW of nuclear power to completely meet the demand projected by the 15th Electric Power Survey. Considering these capacities, the hydro thermal mix at the end of the 11th Plan is likely to be 33:76.

A hydro power station has numerous advantages. Hydro power is a renewable, economic, non-polluting and an environmentally being source of energy. Hydro power stations have the inherent capability of instantaneous starting and stopping, and help in improving reliability of the power system. Hydro stations are in appropriate choice for meeting peak demand. The generation cost is inflation free and reduces with time. Hydroelectric projects have a long useful life extending over 50 years and help in conserving scarce fossil fuels. They also help in development of remote and backward areas.

Replacing Parts/Machinery in Power Generating Units

†4834. SHRI KAPIL SIBAL:
SHRI BALWANT SINGH RAMOOWALIA:

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that generation in the projects can be increased by replacing plants/machinery in power generating units in the country;

†Original notice of the question was received in Hindi.

(b) whether Government have conducted any survey to replace plants/ machinery in the projects engaged in existing power generation; and

(c) if so, the details thereof and total amount likely to be spent thereon together with the annual increase in power generation?

THE MINISTER OF STATE IN THE MINISTRY OF POWER (SHRIMATI JAYAWANTI MEHTA): (a) Yes, Sir. It is fact that power generation in the projects can be increased by undertaking Renovation & Modernisation (R&M).

(b) and (c) Government of India recognised and importance of R and M in 1984 to improve the performance of old thermal generating units. Based on the performance analysis, 34 thermal power stations having 163 units with a total installed capacity of 13570 MW were identified for carrying out R&M during 7th Plan period. A total amount of Rs. 1066 crores was incurred resulting into an additional generation of about 10,000 Million Units/Year. Subsequently, 44 thermal power stations having 198 generating units were identified under Phase-II programme during 8th Plan at an estimated cost of Rs. 2383 crores. The programme is at various stages of completion and on all-India basis, about 75% works have been completed resulting into an additional generation of 5000 Million Units per Year after completion of partial works. Further, a large number of thermal units have completed/nearing completion their useful economic life and to keep these units in economical operation for another 15-20 years, many parts of the plants will need to be replaced under R&M/ Life Extension programme.

Similarly, 55 hydel schemes with an aggregate installed capacity of 9653 MW were identified at an estiamted cost of Rs. 1493 crores to accrue benefits of 2531 MW/7181 MUs.

Demand for Power

†4835. SHRI BALWANT SINGH RAMOOWALIA:
DR. D. MASTHAN:

Will the Minister of POWER be pleased to state:

(a) whether it is a fact that the demand for power in the country by 2012 is estimated to be of 1,07,000 MWs;

(b) if not, what are the facts in this regard and whether Government have

†Original notice of the question was received in Hindi.